

**ICF International / Laboratory Data Consultants**

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**MEMORANDUM**

**TO:** Chris Lichens, Remedial Project Manager  
 Site Cleanup Section 4, SFD-7-4

**THROUGH:** Rose Fong, ESAT Task Order Manager (TOM) *RF*  
 Quality Assurance (QA) Program, MTS-3

**FROM:** Doug Lindelof, Data Review Task Manager *[Signature]*  
 Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041  
 Technical Direction Form No.: 00105113

**DATE:** February 22, 2008

**SUBJECT:** Review of Analytical Data, **Tier 2**

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

|                   |  |
|-------------------|--|
| Site:             | Omega Chem OU2   |
| Site Account No.: | 09 BC QB02   |
| CERCLIS ID No.:   | CAD042245001   |
| Case No.:         | Not Provided   |
| SDG No.:          | IQG0718, IQG1348, IQG1624, IQG1948, IQG2103,<br>IQG2320, and IQG2442 |
| Laboratory:       | Test America Analytical Testing Corp.                                |
| Analysis:         | 1,2,3-Trichloropropane (1,2,3-TCP)                                   |
| Samples:          | 30 Water Samples (see Case Summary)                                  |
| Collection Dates: | July 10, 16, 18, 20, 23, 25, and 26, 2007                            |
| Reviewer:         | April Martinez, ESAT/Laboratory Data Consultants<br>(LDC)            |

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

SAMPLING ISSUES: ☒ Yes    ☐ No



## Data Validation Report - Tier 2

Case No.: Not Provided  
SDG No.: IQG0718, IQG1348, IQG1624, IQG1948, IQG2103, IQG2320, and IQG2442  
Site: Omega Chem OU2  
Laboratory: Test America Analytical Testing Corp.  
Reviewer: April Martinez, ESAT/LDC  
Date: February 22, 2008

### I. CASE SUMMARY

#### Sample Information

Samples: (SDG IQG0718) OC2-MW25D-W-0-582,  
OC2-MW25C-W-0-583, OC2-MW25B-W-0-584,  
OC2-MW25A-W-0-585  
(SDG IQG1348) OC2-MW30-W-0-600,  
OC2-MW28-W-0-601, OC2-MW7-W-0-602  
(SDG IQG1624) OC2-MW17C-W-5-609,  
OC2-MW17B-W-0-610, OC2-MW17A-W-0-611,  
OC2-MW6-W-0-612, OC2-MW5-W-0-613  
(SDG IQG1948) OC2-MW18C-W-0-619,  
OC2-MW18B-W-0-620, OC2-MW18A-W-0-621,  
OC2-MW10-W-0-622  
(SDG IQG2103) OC2-MW16C-W-0-623,  
OC2-MW16B-W-0-624, OC2-MW16A-W-0-625,  
OC2-MW16A-W-1-626, OC2-MW11-W-0-627  
(SDG IQG2320) OC2-MW1B-W-5-632,  
OC2-MW1A-W-0-633, OC2-MW9B-W-0-634,  
OC2-MW9A-W-0-635, OC2-MW19-W-0-636  
(SDG IQG2442) OC2-MW13B-W-0-637,  
OC2-MW2-W-0-639, OC2-MW22-W-0-640,  
OC2-MW21-W-0-641

Concentration and Matrix: Low Concentration Water

Analysis: 1,2,3-TCP (GC/MS)

SOW: EPA Method 524.2

Collection Date: July 10, 16, 18, 20, 23, 25, and 26, 2007

Sample Receipt Date: July 10, 16, 17, 20, 23, 25, and 28, 2007

Analysis Date: July 16, 18, 26, 31, 2007 and August 1, 2, 3, and 7,  
2007

#### Field QC

Field Blanks (FB): Not Provided

Trip Blanks (TB): Not Provided

Equipment Blanks (EB): Not Provided

Background Samples (BG): Not Provided

Field Duplicates (D1): OC2-MW16A-W-0-625 and OC2-MW16A-W-1-626

#### Laboratory QC

Method Blanks & Associated Samples:

C7G1605-BLK1: OC2-MW25D-W-0-582, OC2-MW25C-W-0-583,  
OC2-MW25B-W-0-584, OC2-MW25A-W-0-585

C7G1807-BLK1: OC2-MW30-W-0-600, OC2-MW28-W-0-601,  
OC2-MW7-W-0-602

C7G2611-BLK1: OC2-MW17C-W-5-609, OC2-MW17B-W-0-610,  
OC2-MW17A-W-0-611, OC2-MW6-W-0-612,

OC2-MW5-W-0-613  
 C7G3104-BLK1: OC2-MW18C-W-0-619, OC2-MW18B-W-0-620,  
 OC2-MW18A-W-0-621, OC2-MW10-W-0-622,  
 OC2-MW16C-W-0-623, OC2-MW16B-W-0-624,  
 OC2-MW16A-W-0-625, OC2-MW16A-W-1-626,  
 OC2-MW11-W-0-627  
 C7H0104-BLK1: OC2-MW1B-W-5-632, OC2-MW1A-W-0-633,  
 OC2-MW9B-W-0-634  
 C7H0208-BLK1: OC2-MW9A-W-0-635, OC2-MW19-W-0-636  
 C7H0307-BLK1: OC2-MW13B-W-0-637, OC2-MW2-W-0-639,  
 OC2-MW22-W-0-640  
 C7H0703-BLK1: OC2-MW21-W-0-641

## Tables

### 1B: Data Qualifier Definitions for Organic Data Review

## Sampling Issues

Samples collected on 07/16/07 were received by the laboratory with a cooler temperature of 6.8°C which exceeds the 4±2°C sample preservation criterion. No adverse effect on data quality is expected since the cooler temperature is below 10°C.

## Additional Comments

**As directed by the TOM, a Tier 2 validation (i.e., review all QC results and calibrations, minus calculation check) was performed. A Table 1A is not requested.**

4-Bromofluorobenzene (BFB) was not analyzed. Since 1,2,3-TCP is analyzed by the selected ion monitoring (SIM) technique, no adverse effect is expected.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Volatile and Semivolatile Data Packages*;
- EPA Method 524.2, *Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry*, Revision 4.1, 1995; and
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, July 2007.

## II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

|    | <u>Parameter</u>          | <u>Acceptable</u> | <u>Comment</u> |
|----|---------------------------|-------------------|----------------|
| 1. | Holding Time/Preservation | Yes               |                |
| 2. | GC/MS and GC Performance  | Yes               |                |

|     |                                       |     |   |
|-----|---------------------------------------|-----|---|
| 3.  | Initial Calibration                   | Yes |   |
| 4.  | Continuing Calibration                | Yes |   |
| 5.  | Laboratory Blanks                     | Yes |   |
| 6.  | Field Blanks                          | N/A |   |
| 7.  | Surrogate (Method 524.2)              | No  | A |
| 8.  | Matrix Spike/Matrix Spike Duplicates  | Yes |   |
| 9.  | Laboratory Control Samples/Duplicates | Yes |   |
| 10. | Internal Standard                     | Yes |   |
| 11. | Compound Identification               | Yes |   |
| 12. | Compound Quantitation                 | Yes |   |
| 13. | System Performance                    | Yes |   |
| 14. | Field Duplicate Sample Analysis       | N/A |   |

N/A = Not Applicable

### III. VALIDITY AND COMMENTS

- A. The laboratory did not spike the samples, QC samples, and method blanks with a surrogate (see Method 524.2 Sections 3.2, 7.5, 11.1.2, and 12.1.1 and Table 1). Consequently, the extraction efficiency (surrogate recovery) cannot be evaluated. The 1,2,3-trichloropropane-d5 spiked by the laboratory was used as an internal standard.

**TABLE 1B**

**DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW**

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," July 2007.

- U     The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
- L     Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
- J     The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
- NJ    The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ    The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
- R     The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.